



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,847	12/27/2001	Frank Osan	1999/G-014	2191

7590 03/25/2004

Connolly & Hutz
PO Box 2207
Wilmington, DE 19899

EXAMINER

TRAN, THAO T

ART UNIT	PAPER NUMBER
----------	--------------

1711

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,847

Applicant(s)

OSAN ET AL.

Examiner

Thao T. Tran

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendments

1. This is in response to the Amendments received on November 10, 2003. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.
2. Claims 11-30 are currently pending in this application. Claims 1-10 have been canceled. Claims 28-30 have been newly added.

Specification

3. In view of the prior Office action of July 7, 2003, the objection to the specification has been withdrawn.

Claim Objections

4. In view of the prior Office action of July 7, 2003, the objection to claims 11-27 has been withdrawn due to the Amendments made thereto.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1711

6. Claims 11-28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Hatke et al. (US Pat. 5,610,253).

Hatke teaches a process for preparing a mixture of two or more amorphous polyolefins having different molar masses, the process comprising preparing a high molar mass amorphous polyolefin by solution polymerization in one reactor; admixing the solution with another polymer solution containing other polyolefins; homogenizing the reaction solution (stirring at 750 rpm to form a homogeneous reaction solution); removing the solvent (see Examples 1, 4 and Comparative Example 2).

The reference is silent with respect to the viscosity ratio of the polymer. However, since the reference teaches the same amorphous polyolefin as that in the presently claimed invention, the reference's polymer would inherently have the same physical and chemical properties, i.e., the same viscosity ratio, as presently claimed.

In regards to claims 12-15, Hatke further teaches the amorphous polyolefin having a viscosity number of 172.2 ml/g and a MW of 165,000 g/mol; which read on the instant claims (see Comparative Example 2).

In regards to claims 16-27, Hatke teaches the amorphous polyolefin being a cycloolefin copolymer, comprising from 0.1-100% by weight based on the total mass of the cycloolefin copolymer, of polymerized units derived from at least one polycyclic olefin of the recited formulae; and the cycloolefin copolymers comprising polymerized units derived from olefins having a norbornene skeleton (see col. 1, ln. 41 to col. 2, ln. 67; col. 3, ln. 1-29).

Art Unit: 1711

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hatke as applied to claim 28 above.

Hatke is as set forth in claim 28 above and incorporated herein.

Hatke teaches the reactors to be serial (see Example 1), but not in parallel. However, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, that substituting parallel reactors for the serial reactors would have worked as well as the other arrangement and would have given the same results.

Response to Arguments

9. Applicants' arguments filed November 10, 2003 have been fully considered but they are not persuasive.

Throughout the Remarks, Applicants contend that Hatke teaches the preparation of monomodal polyolefins having the same chemical composition; whereas the presently claimed invention is a preparation of a bimodal or multimodal amorphous polyolefin as a mixture of two or more polymers having different molar masses. However, as pointed out in the prior Office

Art Unit: 1711

action and in paragraph 5 above, Hatke does teach the preparation of polyolefins having different molar masses, such as functionalized polymers and block copolymers (see col. 1, ln. 6-7).

Applicants further contend that the presently claimed invention teaches the process of preparing polymers of different masses separately from each other and subsequently mixing the polymers and homogenizing them in solution, before separating the solvent off. However, this process is not included in the claim language. Neither the claim language includes the molar mass distribution of the polymers.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1711

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 8:30 a.m. - 5:00 p.m..

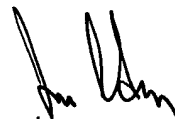
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt

tt

March 19, 2004



James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700